

## WHAT IS CLAIMED IS:

1. A passage of an air purifier, comprising a plurality of filter layers being stacked layer by layer in a predetermined space and further comprising a light catalyst; the surface of each filter layer having a plurality of engraved openings, and a plurality of recessions on the surface panel, as the filter layers are stacked, each of the concessions is disposed below the surface of the filter layer forming an isolating section at the position where the recession lands such that a plurality of passages having an appropriate gap between every two layer filters and every two isolating sections that allows the air to pass through the passage between two filter layers for disinfections.
2. A passage of an air purifier as claimed in claim 1, wherein said recessions of the filter layer are interlaced forming a protruding section between every two recessions, such that the entire structure is in a wave shape.
3. A passage of an air purifier as claimed in claim 2, wherein said isolating section is formed by coupling the recession of every filter layer to the protruded section of the filter layer below.
4. A passage of an air purifier as claimed in claim 1, wherein said filter layer is made of aluminum plates.
5. A passage of an air purifier as claimed in claim 1, wherein said recession of each filter layer is subsided from the engraved openings.
6. A passage of an air purifier as claimed in claim 5, wherein said filter layer is made of plastic plates.
7. A passage of an air purifier, having a light catalyst passage with the incident

ultraviolet lamp shining on it between the base having a fan and a cover having a gas inlet and a gas outlet, characterized in that said passage comprises: a plurality of light catalyst filter layers being stacked layer by layer in a predetermined space, and the surface of each filter layer has a plurality of engraved openings, and a plurality of recessions being formed on the surface panel, as the filter layers are stacked, each of the concessions is disposed below the surface of the filter layer forming an isolating section at the position where the recession lands such that a plurality of passages having an appropriate gap between every two layer filters and every two isolating sections that allows the air to pass through the passage between two filter layers for disinfections.

8. A passage of an air purifier as claimed in Claim 7 wherein said recession of each filter layer being interlaced with each other forms a protruded section between two recessions so that the entire structure is in a wave shape,

9. A passage of an air purifier as claimed in Claim 8 wherein said isolating section is formed by coupling the recession of each filter layer to the protruded section of the filter layer below.

10. A passage of an air purifier as claimed in Claim 7 wherein said filter layer is made of aluminum plates.

11. A passage of an air purifier as claimed in Claim 7 wherein said recession of each filter layer being subsided from the engraved opening.

12. A passage of an air purifier as claimed in Claim 1 wherein said filter layer is made of plastic plates.